Saving Lives With Big Data

"This data has already saved lives"
Paul Botterill, Data Manager
LFRS Tri Service Data Lead

Introduction

Leicestershire Tri-Service Fire and Rescue are using Basemap's speed datasets in their Command and Control System after initially trialing the data for 6 weeks. They had previously used AVLS plus manual updates for routing, but Data Manager Paul Botterill noted that this "Did not provide realistic and accurate resource proposals, especially in known areas where higher speeds were achievable". By using our speed datasets, they are now able to provide more efficient and quicker routing and have also reduced the number of challenges on mobilising decisions.

Background

Derbyshire, Leicestershire and Nottinghamshire Fire and Rescue Services have been part of a Tri-Service collaboration for the implementation of a single linked mobilisation system. This partnership has removed the 'internal' borders of mobilisations with the aim being to achieve the most appropriate and fastest response to all incidents. Richard Calder, Head of Tri Service Control explained "To enable this, several variables need to be considered including the suggested time taken to reach the incident location. Initially, generic speeds were allocated to the Ordnance Surveys detailed road network on the road type (Motorway A, B, C, local) and whether the road was located within an urban or rural environment".

The Solutions

01	**TM Speeds**	Using in-vehicle telematics data, the Fire Service can see Traffic Speeds on average to get a more realistic picture of response time.
02	**Accessible Data**	The data is available through Ordnance Survey, FREE for public sector businesses meaning a highly accurate road data set can be accessed not just for Leicestershire Fire but other like-minded firms.
03	**Saving Time & Money**	The accurate data has solved Leicestershire Fire from unnecessary data reporting with over 270 hours reported in 2019 and almost £85,000 in staff saving.

The Challenge

After several months, a review suggested that a significant number of reports received by crews were incorrect and other resources may have been closer/quicker to reach the incident. The number of reports and questions relating to mobilisations continued to increase and each report needed investigation across several departments into the factors that influenced which resource had been allocated and why. "The disruption to business as usual working and the financial impact of these investigations was substantial and equated to 1.75 FTE posts and a cost of £50k pa" Richard noted.

"The datasets from Basemap have provided accurate travel data which has improved our capability in predicting potential attendance times to be used within our mobilising system and fulfil our aim of providing the nearest/quickest resource to attend a location". This solution has saved countless lives.

TM Speeds Desktop